

CLAIMS

What is claimed is:

- 1 1. A multi-server rack comprising at least one frame for housing servers, the servers having
2 power, keyboard, video, and mouse (K/V/M), and universal serial bus (USB) connections; a server
3 power consolidator attached to the at least one frame that connects with and consolidates the
4 servers' respective power connections; and a server K/V/M and USB connection concentrator
5 attached to the at least one frame that connects with and consolidates the servers' respective
6 K/V/M and USB connections.
- 1 2. The multi-server rack of claim 1 wherein the server power consolidator includes power
2 connectors located on the power consolidator for connecting to the servers' power connections and
3 at least one consolidated power connection for connecting power to the power consolidator.
- 1 3. The multi-server rack of claim 1 wherein the server K/V/M and USB connection
2 concentrator includes K/V/M and USB connections located on the connection concentrator for
3 connecting to K/V/M and USB connections on each of the servers and a consolidated K/V/M and
4 USB connection located on the connection concentrator, the consolidated K/V/M and USB
5 connections allowing one connector to be used for selective communication with the servers'
6 K/V/M and USB connections.
- 1 4. The multi-server rack of claim 1 wherein the frame further comprises at least one frame
2 network panel; the servers further include network connections; and wherein frame network
3 connectors connect the servers' network connections to network connections on the at least one

4 frame network panel such that outside network connectors may connect with the network panel
5 connections and thus be connected with the servers' network connections.

1 5. The multi-server rack of claim 1 wherein the servers have network connections and the
2 server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective network connections

1 6. The multi-server rack of claim 5 wherein the server K/V/M and USB connection
2 concentrator includes network connections located on the connection concentrator for connecting
3 to the network connections on each of the servers and a consolidated network connection located
4 on the connection concentrator, the consolidated network connection allowing one connector to be
5 used for selective communication with the servers' network connections.

1 7. The multi-server rack of claim 1 wherein the servers have parallel port connections and the
2 server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective parallel port connections

1 8. The multi-server rack of claim 7 wherein the server K/V/M and USB connection
2 concentrator includes parallel port connections located on the connection concentrator for
3 connecting to the parallel port connections on each of the servers and a consolidated parallel port
4 connection located on the connection concentrator, the consolidated parallel port connection
5 allowing one connector to be used for selective communication with the servers' parallel port
6 connections.

1 9. The multi-server rack of claim 1 wherein the servers have serial port connections and the
2 server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective serial port connections

1 10. The multi-server rack of claim 9 wherein the server K/V/M and USB connection
2 concentrator includes serial port connections located on the connection concentrator for connecting
3 to the serial port connections on each of the servers and a consolidated serial port connection
4 located on the connection concentrator, the consolidated serial port connection allowing one
5 connector to be used for selective communication with the servers' serial port connections.

1 11. A multi-server frame for housing servers, the servers having power, keyboard, video, and
2 mouse (K/V/M), and universal serial bus (USB) connections; a server power consolidator attached
3 to the frame that connects with and consolidates the servers' respective power connections; and a
4 server K/V/M and USB connection concentrator attached to the frame that connects with and
5 consolidates the servers' respective K/V/M and USB connections.

1 12. The multi-server frame of claim 12 wherein the server power consolidator includes power
2 connectors located on the power consolidator for connecting to the servers' power connections and
3 at least one consolidated power connection for connecting power to the power consolidator.

1 13. The multi-server frame of claim 11 wherein the server K/V/M and USB connection
2 concentrator includes K/V/M and USB connections located on the connection concentrator for
3 connecting to K/V/M and USB connections on each of the servers and a consolidated K/V/M and

4 USB connection located on the connection concentrator, the consolidated K/V/M and USB
5 connections allowing one connector to be used for selective communication with the servers'
6 K/V/M and USB connections.

1 14. The multi-server frame of claim 11 wherein the frame further comprises at least one frame
2 network panel; the servers further include network connections; and wherein frame network
3 connectors connect the servers' network connections to network connections on the at least one
4 frame network panel such that outside network connectors may connect with the network panel
5 connections and thus be connected with the servers' network connections.

1 15. The multi-server frame of claim 1 wherein the servers have network connections and the
2 server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective network connections

1 16. The multi-server frame of claim 15 wherein the server K/V/M and USB connection
2 concentrator includes network connections located on the connection concentrator for connecting
3 to the network connections on each of the servers and a consolidated network connection located
4 on the connection concentrator, the consolidated network connection allowing one connector to be
5 used for selective communication with the servers' network connections.

1 17. The multi-server frame of claim 11 wherein the servers have parallel port connections and
2 the server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective parallel port connections

1 18. The multi-server frame of claim 17 wherein the server K/V/M and USB connection
2 concentrator includes parallel port connections located on the connection concentrator for
3 connecting to the parallel port connections on each of the servers and a consolidated parallel port
4 connection located on the connection concentrator, the consolidated parallel port connection
5 allowing one connector to be used for selective communication with the servers' parallel port
6 connections.

1 19. The multi-server frame of claim 11 wherein the servers have serial port connections and the
2 server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective serial port connections

1 20. The multi-server frame of claim 19 wherein the server K/V/M and USB connection
2 concentrator includes serial port connections located on the connection concentrator for connecting
3 to the serial port connections on each of the servers and a consolidated serial port connection
4 located on the connection concentrator, the consolidated serial port connection allowing one
5 connector to be used for selective communication with the servers' serial port connections.

1 21. The multi-server frame of claim 11 wherein the multi-server frame further includes mounts
2 for mounting the frame into a server rack.

1 22. The method of connecting at least one server to a host computer comprising consolidating
2 power connections for each server into a consolidated power connection; consolidating keyboard,
3 video, and mouse (K/V/M) and universal serial bus (USB) connections for each server into at least

4 one switch each for the consolidated K/V/M and USB connections; connecting the consolidated
5 power connection and K/V/M and USB switches to the host computer; selectively communicating
6 between the host computer and a servers' K/V/M and USB connections using the consolidated
7 connection switches.

1 23. The method of claim 22 further comprising consolidating serial port connections for each
2 server into at least one consolidated serial port connection switch; connecting the consolidated
3 serial port connection switch to the host computer; selectively communicating between the host
4 computer and a server's serial port connector using the consolidated serial port connector switch.

1 24. The method of claim 22 further comprising consolidating parallel port connectors for each
2 server into at least one consolidated parallel port connector switch; connecting the consolidated
3 parallel port connector switch to the host computer; selectively communicating between the host
4 computer and a server's parallel port connector using the consolidated parallel port connector
5 switch.

1 25. The method of claim 16 further comprising consolidating network connectors for each
2 server into at least one consolidated network connector switch; connecting the consolidated
3 network connector switch to the host computer; selectively communicating between the host
4 computer and a server's network connector using the consolidated network connector switch.